

NOAA CLIMATE GOAL QUARTERLY

In February, Mary Glackin announced Dr. Tom Karl, currently Director of NOAA's National Climatic Data Center will lead a cross-agency effort to improve the effectiveness of NOAA's climate services; and Dr. Chet Koblinsky, currently Director of NOAA's Climate Program Office, will serve as Dr. Karl's deputy. Dr. Karl is recognized across the community for his scientific expertise and climate leadership. The focus of NOAA's resources and efforts along these lines will include: aligning and harmonizing internal climate efforts; understanding, planning for, and responding to service demands; and improving NOAA employees' understanding of climate change while establishing leadership positions for national and international engagement.

Progress on the World's First Global Climate Reference Upper Air Network: Two developments in March 2009 highlight progress in implementing the world's first climate reference network for upper-air observations, the GCOS (Global Climate Observing System) Reference Upper Air Network (GRUAN). The first is an article that appeared in the March 2009 issue of the Bulletin of the American Meteorological Society entitled "Reference Upper-Air Observations for Climate: Rationale, Progress, and Plans" by NOAA Air Resources Laboratory scientist Dr. Dian Seidel and co-authors. The article answers the basic "who, what, where, when, why, and how" questions about GRUAN and invites readers' constructive feedback and participation in the new network.

In addition, the first GRUAN Implementation-Coordination Meeting was held 2-4 March 2009, in Norman, Oklahoma, with international participation by climate scientists, instrument experts, site operators, and program managers. The meeting goal was to agree on the mode of operation of GRUAN and on a series of actions to gain support from the scientific community, sponsors, and funding agencies. Among the meeting accomplishments were: assessment of GRUAN progress to date; further refinement of the GRUAN measurement requirements; development of options for GRUAN data dissemination; plans for GRUAN participation in a 2010 in-situ and remote sensing intercomparison campaign; plans for preparation of a GRUAN manual of operations. (Source: Dian Seidel)

Leading climate scientists around the world met at the International Pacific Research Center at the University of Hawaii to discuss the latest developments in climate change

sciences. The workshop was jointly sponsored by the Intergovernmental Panel on Climate Change (IPCC), the World Climate Research Programme (WCRP) and the International Geosphere-Biosphere Programme (IGBP).

The goal of this workshop was to identify the latest developments in Climate Change science and discuss their implications on the understanding of the Earth System and its response to ongoing accelerated emissions of greenhouse gases and pollution particulates (aerosols), and deforestation. The findings will be made available for the planning of the Fifth Assessment Report of the IPCC, which is due in 2013. (Source: Maria Seltzer)

New monthly seminar series on sustainable energy and atmospheric sciences is now available in Colorado. The series is designed to enhance communication and collaboration among scientists at NREL, NOAA ESRL, and others in the community working on issues related to renewable energy. This series brings together those who can combine their knowledge and expertise to solve the problems that have slowed the integration of renewable energy sources into the U.S. electric grid. Scientists at the University of Colorado, School of Mines, Colorado State University, the National Center for Atmospheric Research and private industry are encouraged to participate. The location will alternate between NOAA in Boulder and NREL in Golden as will the affiliation of the speaker. <http://www.esrl.noaa.gov/research/events/seas/> (Source: Melinda Marquis)

New Weather, Climate, and Society journal is now available. The American Meteorological Society's new journal, Weather, Climate, and Society is an international scholarly

journal for peer-reviewed, scientific research and analysis on the interactions of weather and climate with society. The journal encompasses economic, policy, institutional, social, and behavioral research, including mitigation and adaptation to weather and climate changes. Articles may focus on socio-economic, policy, or technological influences on weather and climate or on the socioeconomic impacts of weather and climate. Because of the interdisciplinary subject matter, articles that involve both natural/physical scientists and social scientists are particularly encouraged. The Journal will also include shorter notes, policy forums, reviews and a discussion section.

<http://www.ametsoc.org/pubs/journals/wcs/index.html>

(Source: Hetal Jain)

Coastal Zone 2009 Conference Boston, MA - Revolutionary Times: Catching the Wave of Change. The conference will be held from July 19 to 23, 2009 at the Boston Park Plaza Hotel and Terrace in Boston, Massachusetts. Sessions will be organized around three conference tracks: coastal communities adapting to changing conditions; conservation in the face of change; and ocean and Great Lakes planning for changing human uses. Within each track, presentations will emphasize one of four focus areas: research and monitoring; tools and training; education and outreach; and policy and evaluation. <http://www.csc.noaa.gov/cz/>
(Source: Hanna Goss)

Representatives Waxman and Markey have created a discussion draft of comprehensive energy legislation, the American Clean Energy and Security Act of 2009. The legislation has four titles:

1. **Clean Energy:** This title would promote renewable energy resources, carbon capture and sequestration technology development, clean fuels and vehicles, smart grid deployment and renewable energy transmission.
2. **Energy Efficiency:** This title would promote energy efficiency in buildings, manufactured homes, appliances, transportation, utilities, industry, the public sector and Federal agencies.
3. **Reducing Global Warming Pollution:** This title would establish a market-based (i.e. cap and trade) program for reducing global warming pollution for entities that emit more than 25,000 tons per year of CO₂. The program would reduce emissions to 20 percent below 2005 levels by 2020 and by 83 percent by 2050. An additional 10% reduction would be achieved through efforts to prevent international deforestation. This title also provides guidance for offsetting reductions, banking and borrowing emission

allowances, overseeing and regulating the market, and regulating greenhouse gases not included in the market. Finally, this title would clarify that greenhouse gases cannot be regulated using the Clean Air Act.

4. **Transitioning to a Clean Energy Economy:** This title would create programs to address issues related to American competitiveness, green jobs, exporting clean technology, and adapting to global warming. NOAA is specifically required to establish a National Climate Change Adaptation Program.

There are several sections of the draft that remain to be developed including the allocation of tradable emission allowances, distribution of auction revenue and consumer assistance provisions. (Source: Amanda McCarty)

Climate Literacy Guide Published: A guide is now available to help individuals of all ages understand how climate influences them and how they influence climate. "Climate Literacy: The Essential Principles of Climate Science" is a product of the U.S. Climate Change Science Program (CCSP) and was compiled by an interagency group, led by NOAA. The release of the guide coincided with the National Science Teachers Association's 2009 National Conference in New Orleans, LA.

The Climate Literacy guide supports the development of formal and informal educational materials about climate science plus professional development opportunities for educators. In the document, eight principles and a host of supporting concepts list information for individuals and communities to know about Earth's climate. Developers of the guide intend to integrate the framework into national and state education standards, and to support teacher workshops to ensure that educators are proficient in teaching the concepts of climate science.

To download this guide and related documents, visit:

www.climate.noaa.gov or

www.climate.noaa.gov/education

(Source: Frank Niepold)

Local Strategies for Addressing Climate Change, a new publication from the NOAA Coastal Services Center, has been distributed to coastal resource managers around the country and can be accessed from the Center's website at www.csc.noaa.gov/magazine/climatechangestrategies.pdf. The publication is a compilation of articles recently published in the Center's national trade journal for coastal managers, *Coastal Services*, and it highlights the many things that local and state coastal managers are already doing to specifically or indirectly address the effects of climate change. A national guide on

how to plan for and adapt to climate change is featured, as are examples of how coastal managers are addressing issues such as sea level rise and rising sea temperatures. The Center's data and tools that can best help coastal managers address climate change are also highlighted. **(Source: Donna McCaskill)**

Climate Information Products and Applications Program review: The Climate Goal Team recently conducted their annual review of the Climate Services Development Program. Part I of the review was conducted through two days of virtual meetings and was a retrospective analysis of existing activities, accomplishments, and outcomes for the program. Part 2 of the review will be conducted in Boulder, Colorado from July 13-15 and will include identification of cross-program connections, synergies and gaps, strategic planning and recommendations for the way forward. *(Source: Jennifer Faught)*

NWS "Climate, Drought, and Early Warning on Western Native Lands Training" – June 9-11, 2009, Jackson Lodge, Grand Teton National Park, Wyoming. The multi-agency National Integrated Drought Information System (NIDIS), in partnership with Sinte Gleska University (on the Rosebud Reservation, South Dakota), Haskell Indian Nations University, and IWN, is convening a workshop on assessing and responding to drought and climate impacts on western Native Lands. A watershed approach will be used with key participants from Native communities and organizations, from major river basins west of the Mississippi River, who are involved in developing and protecting water and energy resources, wildlife, and the environment. *(Source: Doug Kluck/NWS/CR CSPM)*